

**CLAIMS:**

1. A testing device for the identification of an analyte of interest in a sample, comprising:
  - a. a sample application matrix adapted for receipt of a sample, and
  - b. at least one insertable testing element adapted for liquid-conductive communication with the sample application matrix such that components of the liquid-containing sample are carried from the sample application matrix to the testing element or elements.
2. The testing device of claim 1, wherein the or each testing element is adapted to be inserted into the test device so that the testing element is in liquid-conductive communication with said sample application matrix.
3. The testing device of claim 1, wherein the analyte of interest is an antibody, antigen, hapten or a molecule capable of interacting with same.
4. The testing device of claim 3, wherein the antigen or hapten is a diagnostic indicator of a disease state in an organism.
5. The testing device of claim 4, wherein the organism is a human.
6. The testing device of claim 5, wherein the disease state is selected from the group consisting of cancer and pathogenic infection.
7. The testing device of claim 3, wherein the antigen or hapten is a contaminant in food or water.
8. The testing device of claim 7, wherein the antigen or hapten is associated with a disease state in an organism.

9. The testing device of claim 8, wherein the organism is a human.
10. The testing device of claim 4, wherein the disease state is characterised by occult gastrointestinal bleeding.
11. The testing device of claim 10, wherein the analyte of interest is hemoglobin, or a fragment thereof.
12. The testing device of claim 1, wherein the or each insertable test strip is an immunochromatographic test strip.
13. The testing device of claim 12, wherein the or each immunochromatographic test strip comprises a liquid-conductive solid phase material affixed to a backing material.
14. The testing device of claim 13, wherein the or each immunochromatographic test strip is comprised of a contact zone which, following insertion, contacts the sample collection matrix and conducts a solvent front from the sample collection matrix through a detection zone which contains a specific binding reagent, the detection zone being spatially distinct from the contact zone.
15. The testing device of claim 14, wherein the specific binding reagent in the detection zone is an antibody specific for a human blood component.
16. The testing device of claim 15, wherein the human blood component is hemoglobin or a fragment thereof.
17. The testing device of claim 1, wherein the sample is fecal material.
18. The testing device of claim 17, wherein the fecal material is obtained by sampling toilet bowl water.

19. A testing device for the identification of an analyte of interest, comprising:

- a. sample application matrix adapted for:
  - i. receipt of a liquid-containing sample;
  - ii. desiccation of the liquid-containing sample *in situ*; and
  - iii. rehydration of the desiccated liquid-containing sample for transfer to a testing element; and
- b. at least one insertable testing element adapted for liquid-conductive communication with the sample application matrix such that upon rehydration, resolubilized or resuspended components of the liquid sample are carried from the sample application matrix to the testing element or elements.

20. The testing device of claim 19, wherein the or each testing element is adapted to be inserted into the test device so that the testing element is in liquid-conductive communication with said sample application matrix.

21. A testing device for the identification of an analyte of interest, comprising:

- a. a front panel having at least one sample application aperture therein;
- b. a rear panel having at least one solvent application aperture therein;
- c. a sample collection matrix disposed between the rear panel and the front panel, the sample collection matrix being in communication with the sample and solvent application apertures of the front and rear panels; and
- d. at least one insertable testing element adapted for liquid-conductive communication with the sample application matrix such that components of a liquid-containing sample are carried from the sample application matrix to the testing element or elements.

22. The testing device of claim 21, wherein the or each insertable testing element comprises a reagent or reagents enabling detection of the analyte of interest.

23. The testing device of claim 21, further comprising a front panel cover and a rear panel cover which, when closed, restrict access to the sample application aperture and the solvent application aperture.

24. The testing device of claim 23, further comprising a spacer panel disposed between the front panel and the rear panel, said spacer panel being designed to create a testing element insertion void space between the sample application matrix and the front panel in the assembled device.

25. The testing device of claim 21, wherein the analyte of interest is an immune interacting molecule.

26. The testing device according to claim 25, wherein the immune interacting molecule is an antigen, hapten, immunoglobulin or T-cell derived antigen binding molecule.

27. The testing device of claim 25, wherein the antigen or hapten is a diagnostic indicator of a disease state in an organism.

28. The testing device of claim 27, wherein the organism is a human.

29. The testing device of claim 27, wherein the disease state is selected from the group consisting of cancer and pathogenic infection.

30. A method for conducting an assay for identifying an analyte of interest in a sample, comprising:

- providing a testing device comprising a sample application matrix adapted for receipt of a sample;
- applying a sample to the sample application matrix;
- inserting into the testing device at least one insertable testing element

in liquid-conductive communication with the sample application matrix such that components of the sample are carried from the sample application matrix to the testing element or elements; and

d. determining the test results.

31. The method of claim 30, which comprises:

- a. providing a testing device comprising:
  - i. a front panel having at least one sample application aperture therein;
  - ii. a rear panel having at least one solvent application aperture therein; and
  - iii. a sample application matrix disposed between the rear panel and the front panel, the sample application matrix being in communication with the sample and solvent application apertures of the front and rear panels;
- b. by applying a liquid-containing sample to the sample application matrix;
- c. inserting into the testing device at least one insertable testing element in liquid-conductive communication with the sample application matrix, the or each said testing element comprising an immunochromatographic test strip, comprising a liquid-conductive solid phase material and a backing material, and having a contact zone which, following insertion, contacts the sample application matrix and conducts a solvent front from the sample application matrix through a detection zone which contains a specific binding reagent, the detection zone being spatially distinct from the contact zone;
- d. applying solvent to the sample application matrix; and
- e. determining the test results by observing immunochromatographic results.

32. A method for conducting an immunochromatographic assay, comprising:

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- a. providing an immunochromatographic testing device comprising:
  - i. a front panel having at least one sample application aperture therein;
  - ii. a rear panel having at least one solvent application aperture therein; and
  - iii. a sample collection matrix disposed between the rear panel and the front panel, the sample collection matrix being in communication with the sample and solvent application apertures of the front and rear panels;
- b. applying to the sample application matrix, a sample of a bodily fluid or excrement;
- c. inserting into the immunochromatographic testing device at least one insertable immunochromatographic test strip, comprising a liquid-conductive solid phase material and a backing material, the or each insertable immunochromatographic test strip having a contact zone which, following insertion, contacts the sample collection matrix and conducts a solvent front from the sample collection matrix through a detection zone which contains a specific binding reagent, the detection zone being spatially distinct from the contact zone;
- d. applying solvent to the sample application matrix; and
- e. determining test results by observing immunochromatographic results.

33. A testing device for the identification of an analyte of interest, said testing device comprising  
a sample application matrix adapted for receiving a plurality of samples at discrete locations thereon, and aggregating the samples;  
wherein a single test may be performed to simultaneously determine presence of the analyte of interest in a plurality of samples having discrete origin.

34. The testing device of claim 33, further comprising at least one insertable testing

element adapted for liquid-conductive communication with said sample application matrix such that upon hydration, solubilized or suspended components of said plurality of samples are carried from said sample application matrix to said testing element or elements.

35. The testing device of claim 34, wherein said sample application matrix is adapted for :
  - i. receipt of a liquid-containing sample;
  - ii. desiccation of the liquid-containing sample *in situ*; and
  - iii. rehydration of the desiccated liquid-containing sample for transfer to said testing element or elements.
36. The testing device of claim 34, wherein the or each testing element is adapted to be inserted into the test device so that the testing element is in liquid-conductive communication with said sample application matrix.
37. The testing device of claim 33, wherein said sample application matrix is adapted for receipt of a dried sample.
38. A testing device for the identification of an analyte of interest, said testing device comprising:
  - a. a housing having at least one sample orifice selectively openable and sealable for admitting and sealably maintaining a plurality of samples therein, and at least one test orifice adapted for insertion of a testing element or elements therein;
  - b. a sample application matrix disposed within said housing in communication with said at least one sample orifice and said at least one test orifice, said sample application matrix adapted for:
    - i. receipt of the plurality of samples thereon; and
    - ii. aggregating the plurality of samples, wherein the plurality of samples of discrete origin are adapted for being applied and

sealed within said testing device, and subsequently tested in the aggregate.

39. The testing device of claim 38, wherein said sample application matrix is adapted to receive the plurality of samples at a single location thereon.
40. The testing device of claim 39, wherein the plurality of samples are mixed with one another prior to receipt by said matrix.
41. The testing device of claim 38, wherein said sample application matrix is adapted to receive the plurality of samples at discrete locations thereon, said matrix being adapted for aggregating the samples upon said insertion of the testing element or elements.
42. The testing device of claim 38, wherein said at least one sample orifice further comprises a plurality of sample orifices selectively openable and sealable for admitting and sealably maintaining the plurality of samples therein.
43. The testing device of claim 38, wherein the plurality of samples are of discrete temporal origin.
44. The testing device of claim 38, wherein the plurality of samples are of discrete spatial origin.
45. The testing device of claim 38, wherein the plurality of samples are of discrete biological origin.
46. The testing device of claim 38, further comprising at least one testing element adapted for insertion through the or each said test orifice for testing the plurality of samples.

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47. The testing device of claim 38, wherein said sample application matrix is further adapted for hydration of the plurality of samples.

48. The testing device of claim 47, wherein at least one of the plurality of samples contain liquid, and said sample application matrix is further adapted for:  
desiccation of the at least one of the plurality of samples *in situ*;  
rehydration of the desiccated at least one sample; and  
aggregation of resolubilized or resuspended components of said at least one sample with at least one other of the plurality of samples for testing.

49. The testing device of claim 47, wherein the or each said testing element is adapted for application of liquid to said sample application matrix for said hydration.

50. A testing device for the identification of an analyte of interest from a plurality of samples, at least one of the plurality of samples containing liquid, said testing device comprising:  
a sample application matrix adapted for:  
receipt of the plurality of samples at discrete locations thereon;  
desiccation of the at least one of the plurality of samples *in situ*;  
hydration of the plurality of samples; and  
aggregation of solubilized or suspended components of the plurality of liquid samples for analyte analysis, wherein a single test may be performed to simultaneously determine presence of the analyte of interest in a plurality of samples having discrete origin.

51. A method for identification of an analyte of interest from a plurality of samples, said method comprising the steps of:  
a. providing a testing device having a sample application matrix;  
b. applying the plurality of samples to the matrix;

- c. aggregating components of the plurality of samples for analyte analysis; and
- d. utilizing a single test to simultaneously determine presence of the analyte of interest in the plurality of samples.

52. The method of claim 51, wherein said aggregating step c. further comprises the step of hydrating the plurality of samples.

53. The method of claim 51, wherein said aggregating step c. further comprises the step of e. mixing the samples prior to said applying step b.

54. The method of claim 53, wherein said mixing step e. further comprises mixing samples in a liquid state.

55. The method of claim 53, wherein said mixing step e. further comprises mixing samples in a dried state.

56. The method of claim 55, wherein said mixing step e. further comprises stacking a plurality of samples in dried state on the sample application matrix.

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